

## UniTHERM

Thermal Camera Monitoring System



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### Single Camera Thermal Imaging System

UniTHERM is a freely configurable thermal vision system. It comes with one FLIR Thermal Camera.

UniTHERM is ideal for quality control applications, monitoring of production parameters and any other application with the need to monitor temperatures. The built-in recipe manager allows UniTHERM to be adapted to almost any application.

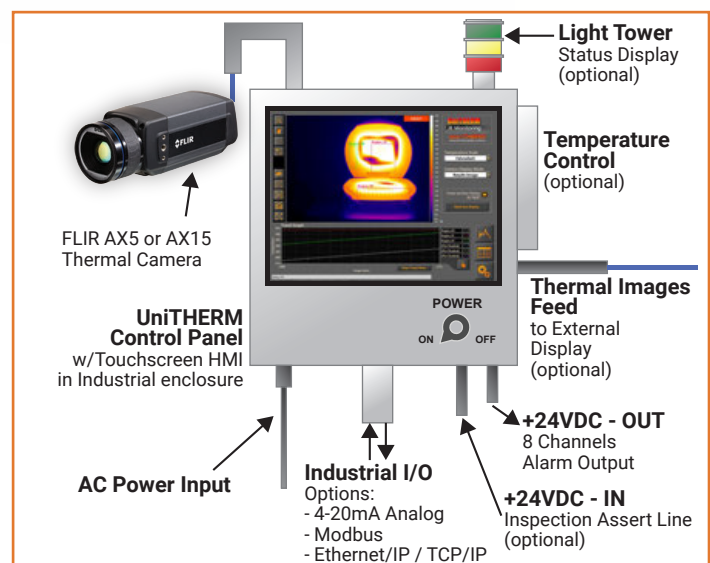
### Start improving your process today!

#### UniTHERM – Feature Highlight

- ✓ Single Camera Thermal Imaging
- ✓ Recipe Manager with unlimited Inspection Recipes
- ✓ Intuitive User Interface with Touchscreen
- ✓ Data & Image Logging
- ✓ Temperature Trend Graph
- ✓ Industrial I/O & Communications Interface
- ✓ Ethernet
- ✓ NEMA4, NEMA4x (Wash down) available
- ✓ Ex-Proof (Class I/Div 2) available

#### UniTHERM – Example Applications

- ✓ Package Seal and Plastic Welding Inspection
- ✓ Food Processing & Cooking Temperatures
- ✓ Metal Quenching, Annealing, Welding
- ✓ Injection Mold & Part Monitoring
- ✓ Automotive Die Cast Monitoring
- ✓ Hot Glue Verification
- ✓ Drying Verification
- ✓ Plastic Film Temperature Distribution



# UniTHERM

## Thermal Camera Monitoring System

### What is Included?

- ✓ One FLIR Thermal Camera
- ✓ Available Camera Resolution either 320 x 240 or 640 x 480 pixels
- ✓ UniTHERM Controller, Wall-mount Enclosure, Panel PC with Touchscreen
- ✓ All necessary support electronics, power supply and cabling

### How can UniTHERM interface to my equipment?

The system offers flexible interface options. This allows the user to interface existing equipment to access status information, pass/fail, system health and inspection data through various interfaces.

- ✓ 24VDC discrete I/O
- ✓ 4-20mA Current Loop Output
- ✓ Ethernet/IP and ModBUS TCP

### What is required for installation?

All that is required for the installation of UniTHERM is standard 110VAC/15A power, one Ethernet cable to the camera, and the I/O connections. The camera is powered over Ethernet (PoE)\*, which makes system installation very convenient. No additional camera power supply or cables are required.

\* Only applicable to FLIR A35/A65

### Does MoviTHERM help with commissioning?

Absolutely! In fact, we recommend hiring MoviTHERM for the commissioning and training phase of the system deployment. Nobody knows our systems better than us. We design and build them! Additionally, you gain access to thermography experts to assure that you achieve the best return on investment. We recommend allocating 1 to 2 days for the deployment of a single system.

### *"Implementing a Thermal Imaging System used to be daunting and risky task."*




MoviTHERM has made it its mission to greatly simplify this process.

We have taken more than a decade of our thermal imaging experience and boiled it down to an easy to use, user friendly solution – "UniTHERM". All the complicated elements are taken care of in the background, hidden from the user. With UniTHERM, we have eliminated risk and learning curve, so you can focus on what's important to your process from day one!

Markus Tarin, President & CEO

### Supported Cameras

Depending on the requirements of your application, any of the following FLIR® Thermal Cameras are supported:

|                          | FLIR® A35   | FLIR® A65   | FLIR® A315   | FLIR® A615  | FLIR® A6601 / A6651   |
|--------------------------|---|---|--|---|---|
|                          |  |  |  |  |    |
| Resolution               | 320 x 256 pixels  | 640 x 512 pixels  | 320 x 240 pixels   | 640 x 480 pixels  | 640 x 512 pixels  |
| Frame Rate               | 60 Hz   | 7.5 Hz / 30Hz   | 60Hz   | 50 Hz (100/200 Hz with windowing)   | 60 Hz<br>125 Hz @ full window   |
| Object Temperature Range | -25°C to +135°C<br>(-13 to 275°F)<br>-40°C to +550°C<br>(-40 to 1022°F)             | -25°C to +135°C<br>(-13 to 275°F)<br>-40°C to +550°C<br>(-40 to 1022°F)             | -20 to +120°C<br>(-4 to 248°F)<br>0 to +350°C<br>(32 to 662°F)                       | -20 to +150°C<br>+100 to +650°C<br>+300 to +2000°C                                    | -20°C to 350°C (-4°F to 662°F) Optional Up to 1,500°C (2,732°F) Up to 2,000°C (3,632°F) |
| Accuracy                 | ±5°C (±9°F) or ±5%  | ±5°C (±9°F) or ±5%  | ±2°C or ±2% of reading   | ±2°C or ±2% of reading  | ±2°C or ±2% of reading  |
| Ethernet, Communication  | GigE Vision ver. 1.2 Client API GenICam compliant                                   | GigE Vision ver. 1.2 Client API GenICam compliant                                   | TCP/IP socket-based FLIR proprietary and GenICam protocol                            | TCP/IP socket-based FLIR proprietary and GenICam protocol                             | Gigabit Ethernet (GigE Vision 2.0)  |

\*\* High Temperature Options available for FLIR A315, please contact MoviTHERM for details